

AMENDMENTS TO THE CLAIMS

Please amend Claim 1 as set forth below.

LISTING OF CLAIMS

1. (Currently amended) A photochromic polyurethane laminate film comprising:

a cast and cured polyurethane film layer having a thickness in the range of about 10 μm to 250 μm , said polyurethane film layer having a high molecular weight resulting from the curing and casting of a formulation wherein the ratio of hydroxyl or amine groups to isocyanate groups in the formulation is in the range of 0.98 to 1.2;

said polyurethane film layer being sandwiched between ~~a thin inner and a thin outer polycarbonate sheets~~ protective resin substrate sheet;

said polyurethane film layer comprising:

at least one organic photochromic compound;

a stabilizer system having two hindered amine light stabilizers and one phenolic antioxidant and the absence of a UV light absorber;

said photochromic compound having a concentration of approximately 0.1% to 6% by weight of said polyurethane film layer;

said stabilizer system having a concentration of approximately 1% to 9% by weight of said polyurethane film layer;

said stabilizer system having a formulation to provide at least a 40% improvement in the light fatigue resistance of the photochromic polyurethane film layer over a film layer not having said formulation; and

said photochromic polyurethane laminate film having said stabilizer system and having a change of less than 6 units in b^* of CIELAB at the clear state for said photochromic polyurethane film layer.

2. (Previously presented) A photochromic polyurethane laminate film of Claim 1 wherein said stabilizer system comprises:

(a) 60% to 90%, by weight, two hindered amine light stabilizers being selected from the group consisting of bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[[3,5-bis(1,1-dimethylethyl)]-[4-hydroxyphenyl]methyl]butyl malonate; Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate; methyl (1,2,2,6,6-pentamethyl-4-piperidiny) sebacate; bis(2,2,6,6-tetramethyl-4-piperidiny)decanedioate; 1-acetyl-4-(3-dodecyl-2,5-dioxo-1-pyrrolidiny)-2,2,6,6-tetramethyl-piperidine N-unsubstituted HALS compounds, and N-methylated HALS compounds.; and

(b) 10% to 40%, by weight, one phenolic antioxidant being selected from the group consisting of tetrakis-(methylene-3-(3',5'-di-t-butyl-4'-hydroxyphenyl) propionate]methane; 1,3,5-trimethyl-2,4,6-tris(3,5-di-tert-butyl-4'-hydroxybenzyl)benzene; 1,3,5-tris(3,5-di-tert-butyl-4'-hydroxybenzyl)isocyanurate; 3,5-di-tert-butyl-4-hydroxyhydrocinnamic triester with 1,3,5-tris(2-hydroxyethyl)s-triazine-2,4,6-(1H,3H,5H)-trione; and 1,3,5-tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)s-triazine-2,4,6-(1H, 3H,5H)-trione.

3. (Previously presented) A photochromic polyurethane laminate film of claim 2 wherein said two hindered amine light stabilizers are bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[[3,5-bis(1,1-dimethylethyl)]-[4-hydroxyphenyl]methyl]butyl malonate and a Bis(1,2,2,6,6-pentamethyl-4-piperidiny) sebacate – methyl (1,2,2,6,6-pentamethyl-4-piperidiny) sebacate blend, and said phenolic antioxidant is tetrakis-(methylene-3-(3',5'-di-t-butyl-4'-hydroxyphenyl) propionate]methane.

4. (Previously presented) A photochromic polyurethane laminate film of claim 1 wherein said photochromic compound is a photochromic naphthopyran.

5. (Previously presented) A photochromic polyurethane laminate film of claim 1 wherein said polyurethane is an aliphatic polyurethane.

6. (Previously presented) A photochromic polyurethane laminate film of claim 1 wherein said polyurethane is an aliphatic polyester polyurethane.
7. (Canceled)
8. (Previously presented) A photochromic polyurethane laminate film of claim 1 wherein the laminate is incorporated into an eyewear lens.